

Faunitaxys

*Revue de Faunistique, Taxonomie et Systématique
morphologique et moléculaire*



Volume 13
Numéro 06

Janvier 2025

ISSN (Print) : 2269 - 6016
ISSN (Online) : 2970 - 4960
Dépôt légal : Janvier 2025

Faunitaxys

*Revue de Faunistique, Taxonomie et Systématique
morphologique et moléculaire*

ZooBank : <https://zoobank.org/79A36B2E-F645-4F9A-AE2B-ED32CE6771CC>

Directeur de la publication, rédacteur, conception graphique et PAO:

Lionel Delaunay

Cette revue ne peut pas être vendue

Elle est distribuée par échange aux institutions (version papier)

et sur simple demande aux particuliers (format PDF)

à l'adresse suivante:

AFCFF (Association française de Cartographie de la Faune et de la Flore)

28, rue Voltaire, F- 42100 Saint Etienne

E-mail: faunitaxys.journal@gmail.com

Elle est disponible librement au téléchargement à partir du site:

<https://faunitaxys.fr/>

La parution de *Faunitaxys* est apériodique

Faunitaxys est indexé dans / *Faunitaxys* is indexed in:

- **Zoological Record**

Articles and nomenclatural novelties are referenced by:

- **ZooBank** (<https://zoobank.org>)

Online Archives:

- **HAL** (<https://hal.archives-ouvertes.fr>)

- **Internet Archive** (<https://archive.org/details/faunitaxys>)

Imprimée sur les presses de SPEED COPIE, 6, rue Tréfilerie, F- 42100 Saint-Etienne

Imprimé le 24 01 2025

Two additional new species of *Cryptorhopalum* (Coleoptera: Dermestidae: Megatominae) from the Dominican Republic

JIRÍ HÁVA (1,*) & JIRÍ HODEČEK (2, 3)

(1) Private Entomological Laboratory & Collection, Rýznerova 37/37, CZ-252 62 Únětice u Prahy, Prague-west, Czech Republic.

- E-mail: jh.dermestidae@volny.cz - Orcid: <https://orcid.org/0000-0001-8076-9538>

- ZooBank: <http://zoobank.org/71D662DB-2F3D-4418-98B6-E1DF82895AC5>

(2) Swiss Human Institute of Forensic Taphonomy, University Centre of Legal Medicine, CH-1000, Lausanne, Switzerland.

(3) Museum Cantonal des Sciences Naturelles (Département Zoologie), Lausanne, Palais de Rumine, Place de la Riponne 6, CH-1014, Lausanne, Switzerland.

- E-mail: jiri.hodecek@chuv.ch - Orcid: <https://orcid.org/0000-0002-4744-0412>

- ZooBank: <https://zoobank.org/DA804828-A8A6-450C-8A0A-819FF216B156>

* Corresponding author

Keywords:

Coleoptera; taxonomy;
Dermestidae; new species;
Megatominae; description;
Cryptorhopalum; Dominican
vegaensis; Republic.
hodeceki;

Abstract. – Two new species of the genus *Cryptorhopalum*: *C. vegaensis* sp. nov. and *C. hodeceki* sp. nov., are described, illustrated, and compared with morphologically similar species. A comprehensive identification key for all *Cryptorhopalum* species recorded from the Dominican Republic is also provided.

Háva J. & Hodeček J., 2025. – Two additional new species of *Cryptorhopalum* (Coleoptera: Dermestidae: Megatominae) from the Dominican Republic. *Faunitaxys*, 13(06): 1 – 5.

DOI: [https://doi.org/10.57800/faunitaxys-13\(06\)](https://doi.org/10.57800/faunitaxys-13(06))

ZooBank: <https://zoobank.org/EA9FA849-4069-452F-B104-B99874BAEBE7>

Received: 30/12/2024 – Revised: 22/01/2025 – Accepted: 23/01/2025

Introduction

The dermestid genus *Cryptorhopalum* Guérin-Méneville, 1838 currently comprises 187 species distributed throughout the Nearctic and Neotropical Regions (Háva 2015, 2024). Seven species have been recorded from the Dominican Republic (Kadej & Háva 2013; Perez-Gelabert 2020; Háva 2024; Háva & Hodeček 2023).

The type specimens of *Cryptorhopalum hodeceki* sp. nov. were collected at high altitude (1500 m) in Hispaniolan pine forest of the Sierra de Baboruco, near an abandoned bauxite mine (Fig. 1). The Sierra de Baboruco represents the Dominican portion of the Hispaniolan mountain range known as the Massif de la Selle in Haiti (Hartshorn et al. 1981). The local vegetation is dominated by the endemic pine species *Pinus occidentalis* Sw. The understory is relatively species-poor and varies depending on the substrate. Among the species found beneath the canopy are the endemic shrub *Salvia selleana* Urb., the endemic palm *Coccothrinax scoparia* Becc., as well as various grasses and ferns (J. Hodeček, personal observation). The climate in this region is relatively dry, and the pine stands are not very dense, although individual trees are quite tall.

The holotype of *Cryptorhopalum vegaensis* sp. nov. was collected at high altitude (1700 m) along a mountain road toward Constanza (Fig. 2). This area is part of the Cordillera Central, the highest mountain range in the Dominican Republic. The local vegetation is dry and dominated by various fern species. The endemic pine *Pinus occidentalis* Sw. is

sparsely distributed at the type locality. However, as one continues up the road to higher elevations, the pine trees become more numerous until a pine forest is formed (J. Hodeček, personal observation).

Material and methods

Between 2021, 2023, and 2024, Jiri Hodecek and Jiri Pirkil carried out entomological fieldwork in the Dominican Republic, concentrating on insect biodiversity, habitat preferences, the identification of new species, and the addition of new faunal records for the area. The collecting methods included light trapping, sweep netting, beat sheeting, and manual specimen collection. This research formed part of a larger project named “Distribución y Biodiversidad de Grupos de Insectos Seleccionados de la República Dominicana,” under collecting permits VAPB-08862 and its extension VAPB-10887, granted by the Ministerio de Medio Ambiente y Recursos Naturales. The project focused on several insect orders, such as Coleoptera, Dermaptera, Zoraptera, Ephemeroptera, Auchenorrhyncha, as well as selected groups of Lepidoptera, Diptera, and Hymenoptera. Selected findings have already been published (Satori 2021; Háva and Hodeček 2023; Lingafelter et al. 2024; Hodecek et al. 2024).

The specimens examined in this manuscript were collected through beating and sweeping, then euthanized using ethyl acetate before being stored in plastic vials filled with sawdust.

Reviewer: Andreas Herrmann (Germany) - <http://zoobank.org/64D7C64F-F16C-4BAB-9BE3-B8B65D1FACDB>



This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

Copyright 2025. The Authors. *Faunitaxys* published by Lionel Delaunay on behalf of the AFCFF (Association française de Cartographie de la Faune et de la Flore).



Fig. 1. Landscape view of the type locality of *C. hodeceki* **sp. nov.** at Sierra de Bahoruco NP, Dominican Republic.



Fig. 2. Landscape view of the type locality of *C. vegaensis* **sp. nov.** at the road toward Constanza in Cordillera Central, Dominican Republic.

The following measurements were made:

TL: Total length = linear distance from anterior margin of head to apex of elytra.

EW: Elytral width = maximum linear transverse distance.

Type material was deposited in the following collections:

MCSN-VD: Muséum Cantonal des Sciences Naturelles (Département Zoologie), Lausanne, Switzerland.

MHNG: Muséum d'Histoire Naturelle, Geneva, Switzerland.

MNHNSD: Museo Nacional de Historia Natural “Prof. Eugenio de Jesús Marcano”, Santo Domingo, Dominican Republic.

JHAC: Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic.

JPPC: Jiří Pírk, private collection, Chomutov, Czech Republic.

Type specimens were provided with red labels: “HOLOTYPE [or PARATYPE] *species name* sp. nov. Jiří Háva det. 2025”.

Results

Cryptorhopalum pirkli Háva & Hodeček, 2023

Material examined: Dominican Republic, Sierra de Bahoruco, 2000 m, 18.2711003N, 71.7248881W, 16.6.2023, J. Pírk lgt., 127 spec., J. Háva det., (40 MCSN-VD, 20 MHNG, 20 MNHNSD, 47 JHAC).

Note. – Additional examined material after the description. Variability of body measurements (mm): TL 2.1–3.4.

Cryptorhopalum hodeceki Háva, sp. nov.

(Fig. 3–5)

ZooBank: <https://zoobank.org/7554185E-AB25-4608-A4A9-8B34625B37AA>

Holotype, ♂, Dominican Republic, Sierra de Bahoruco, [N.P. Bahoruco], Bauxite mine, 18.1376728N, 71.5440594W, 14.6.2023, J. Pírk & J. Hodeček lgt., (MCSN-VD).

Paratypes (15 spec.): same data as holotype, (4 MCSN-VD, 3 MHNG, 2 MNHNSD, 2 JPPC, 4 JHAC).

Description of the holotype

Body. – Body measurements (in mm): TL 2.2, EW 1.4. Dorsal integument black and dark brown (Fig. 3), setation decumbent, yellow. Ventral integument black with decumbent yellow setation.

Head. – Shiny brown, finely punctate, covered with yellow decumbent setation. Palpomeres brown. Median frontal ocellus present. Eyes large, bearing scarcely visible short microsetae. Antennomeres I–II blackish-brown, III–VIII light brown, IX–XI dark brown, all with yellow setation. Antennae composed of 11 antennomeres, with a 3-segmented antennal club (Fig. 4). Antennal fossa closed.

Pronotum. – Black, finely punctate, with posterior lateral angles coarsely punctate and covered with yellow setation.

Scutellum. – Brown, small, triangular, without punctuation or setation.

Elytra. – Black, becoming brown in the posterior one-third, with decumbent yellow setation. Each elytron with a small humeral bump.

Epipleuron. – Short, dark brown, with some yellow decumbent setation.

Ventral surface. – Mesoventrums and metaventrums black, coarsely punctate, with yellow decumbent setation. Visible abdominal ventrites shiny, black, densely and coarsely punctate, with yellow decumbent setation. Abdominal sternite IX spatulate, with a slightly narrowed apex. Pygidium black, coarsely punctate.

Legs. – Tarsi light brown, tibiae brown, femora brown, all sparsely covered with very short, fine, decumbent brown and yellow setae. Anterior tibiae with black spines along the shaft.

Male genitalia. – (Fig. 5).

Female. – Externally similar to the male, but distinguished by a smaller antennal club.

Variability. – Body measurements (in mm): TL 1.8–2.6, EW 1.2–1.6.

Etymology. – Patronymic, dedicated to collector and donator of the type material Jiří Hodeček.

Differential diagnosis. – The new species closely resembles *C. youngi* Kadej & Háva, 2013, but can be distinguished from this and other Dominican species by the characteristics outlined in the following key.

Cryptorhopalum vegaensis Háva, sp. nov.

(Fig. 6–8)

ZooBank: <https://zoobank.org/508F2D53-DD06-4654-9E98-3F61EDE02151>

Holotype, ♂, Dominican Republic, La Cienaga [La Vega prov., 10 km NE of Constanza], 18.9952861N, 70.8361256W, 18.6.2023, J. Pírk lgt., (MCSN-VD).

Description of the holotype

Body. – Body measurements (in mm): TL 3.2, EW 1.9. Dorsal integument black (Fig. 6), with decumbent yellow and black setation. Ventral integument black, with yellow decumbent setation.

Head. – Shiny brown, finely punctate, covered with yellow decumbent setation. Palpomeres light brown. Median frontal ocellus present. Eyes large, bearing scarcely visible short microsetae. Antennae brown with yellow setation, consisting of 11 antennomeres and a 3-segmented antennal club (Fig. 7). Antennal fossa closed.

Pronotum. – Black with yellow decumbent setation; finely punctate.

Scutellum. – Black, shiny, small, triangular, without punctuation or setation.

Elytra. – Black with both black and yellow setae. Yellow setae form a narrow transverse fascia near the pronotum, extending from the humerus to the scutellum; elsewhere predominantly black decumbent setation. Elytra more densely and finely punctate than the pronotum. Each elytron with a small humeral bump.

Epipleuron. – Short, black, with some yellow decumbent setation.

Ventral surface. – Mesoventrums and metaventrums black, coarsely punctate, with yellow decumbent setation. Visible abdominal ventrites shiny, black, densely and coarsely punctate, with yellow decumbent setation. Pygidium brown, covered with yellow setation.

Legs. – Tarsi light brown, tibiae light brown, femora brown. All sparsely covered with short, fine, decumbent setae, intermixed brown and yellow. Anterior tibiae with black spines along the shaft.

Male genitalia. – (Fig. 8).

Female. – Unknown.

Etymology. – The species is named after its type locality in La Vega Province.

Differential diagnosis. – The new species closely resembles *C. delacruz* Kadej & Háva, 2013, but can be distinguished from that species and other Dominican representatives by the diagnostic traits provided in the following key.

Acknowledgements

We thank Jiří Pírk for his collaboration and assistance with the expedition. Our thanks also go to Dr. Michel Sartori and Prof. Nadir Alvarez for their support and to Pavel Krásenský for the pictures. We appreciate Gabriel de los Santos for his help in the Dominican Republic, and we are grateful to the Ministerio de Medio Ambiente y Recursos Naturales for issuing the necessary collecting and export permits (VAPB-08862, VAPB-10887). Lastly, we thank the reviewers for their valuable comments that helped enhance our article.

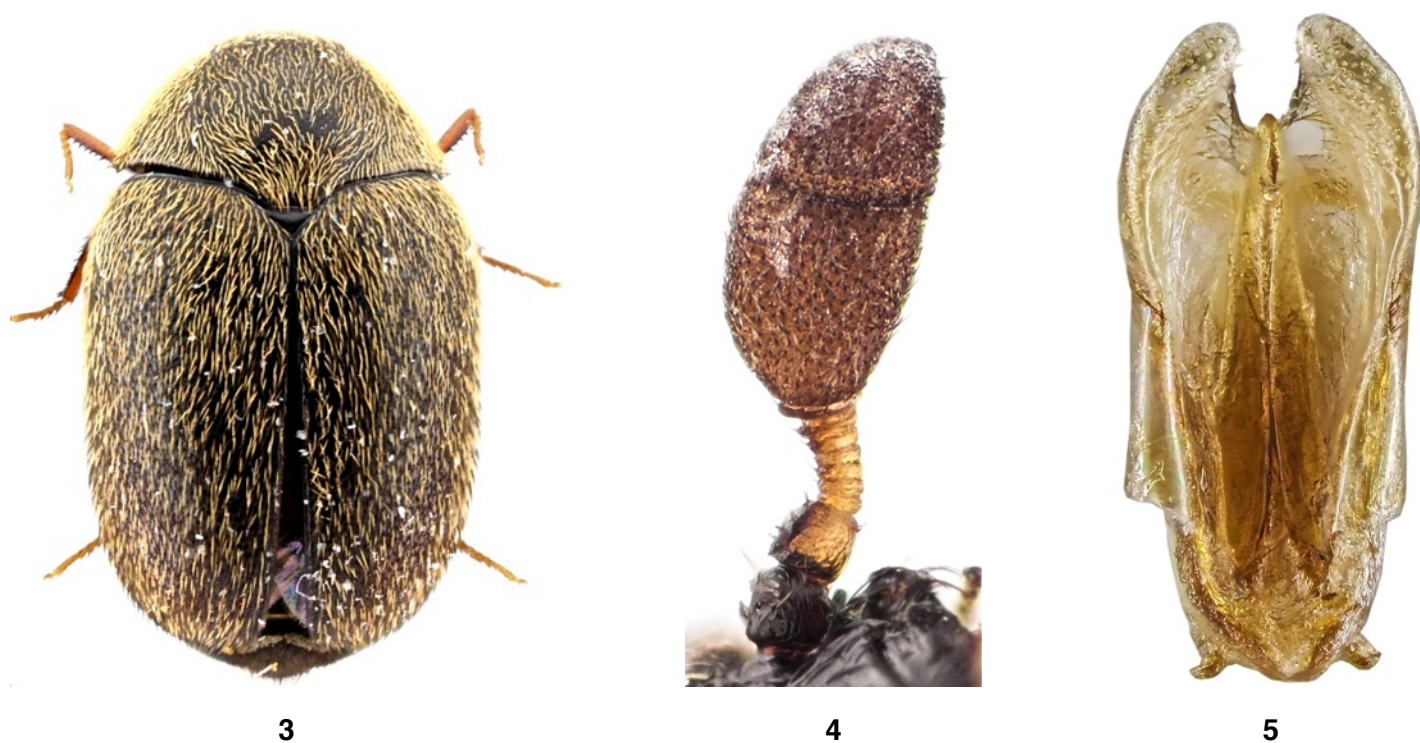


Fig. 3-5. *Cryptorhopalum hodeceki* Háva, **sp. nov.**

1. Habitus, dorsal aspect (paratype). 2. Antennae of male (holotype). 3. Male genitalia (holotype).



Fig. 6-8. *Cryptorhopalum vegaensis* Háva, **sp. nov.**

6. Habitus, dorsal aspect (holotype). 7. Antennae of male. 8. Male genitalia (holotype).

Key of species recorded from the Dominican Republic.

1. (2) Body shape subovate; body and antennae brown *C. davidsoni* Kadej & Háva, 2013
2. (1) Body shape ovate; color variable.
3. (10) Elytral pubescence bicolored.
4. (5) Elytra without transverse bands or spots *C. acevedoi* Kadej & Háva, 2013
5. (4) Elytra with bands or spots.
6. (9) Each elytron with 1 transverse, narrow band.
7. (8) Elytral band situated in the middle of the elytron *C. delacruz* Kadej & Háva, 2013
8. (7) Each elytron with a humeral transverse band of yellow setae near the pronotum *C. vegaensis* sp. nov.
9. (6) Each elytron with 2 transverse bands *C. pirkli* Háva & Hodeček, 2023
10. (3) Elytral pubescence unicolored.
11. (12) Apical part of parameres very broad. Body dark brown, antennae dark brown *C. rawlinsoni* Kadej & Háva, 2013
12. (11) Apical part of parameres thin (slender).
13. (14) Body brown; pronotum sparsely punctured and covered with light golden-brown setation; pygidium brown, finely punctured; abdominal sternite IX spatula-like with a broadly rounded apex *C. thompsonii* Kadej & Háva, 2013
14. (13) Body black.
15. (16) Pronotum entirely sparsely punctured and covered with light gold setation; pygidium brown, finely punctured; tibiae with brown spines; abdominal sternite IX spatula-like with a slightly narrowed apex *C. youngi* Kadej & Háva, 2013
16. (15) Pronotum finely punctured, with posterior lateral angles coarsely punctured and covered with yellow setation; pygidium black, coarsely punctured; tibiae with black spines; abdominal sternite IX spatula-like with a broad apex *C. hodeceki* sp. nov.

References

- Hartshorn G., Antonini G. & Dubois R. et al., 1981. – La República Dominicana. Perfil ambiental del país. Un estudio de Campo. JRB Associates, Virginia, USA.
- Háva J., 2015. – *World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera)*. Leiden/Boston: Brill, xxvi + 419 pp.
- Háva J., 2024. – *Dermestidae World (Coleoptera)*. - World Wide Web electronic publication (open in 2004): <http://www.dermestidae.wz.cz> (version 2018, update September 2024).
- Háva J. & Hodeček J., 2023. – A new species of *Cryptorhopalum* (Coleoptera: Dermestidae: Megatominae) from the Dominican Republic. *Faunitaxys* 11(48): 1-3. [https://doi.org/10.57800/faunitaxys-11\(48\)](https://doi.org/10.57800/faunitaxys-11(48))
- Hodeček J., Messer P. W. & Bruschi S., 2024. – *Calosoma peregrinator* Guérin-Méneville Discovered in the Dominican Republic: The Fourth Species of *Calosoma* Weber (Coleoptera: Carabidae) in the West Indies *The Coleopterists Bulletin* 78(3): 348-352.
- Kadej M. & Háva J., 2013. – Key to species of the genus *Cryptorhopalum* (Coleoptera: Dermestidae) occurring in the Greater Antilles with description of six new species from Hispaniola. *Zoological Studies* 52(5): 1-15.
- Lingafelter S. W., Touroult J. & Hodeček J., 2024. – A new species of *Eburia* (Coleoptera: Cerambycidae: Cerambycinae: Eburini) from the Dominican Republic. *Faunitaxys* 12(7): 1-7. [https://doi.org/10.57800/faunitaxys-12\(7\)](https://doi.org/10.57800/faunitaxys-12(7))
- Perez-Gelabert D. E., 2020. – Checklist, bibliography and quantitative data of the Arthropods of Hispaniola. *Zootaxa* 4749(1): 1-668.
- Satori M., 2021. – A new species of *Neohagenulus* Traver, 1938 from Hispaniola (Ephemeroptera, Leptophlebiidae, Hagenulinae, Hagenulini). *ZooKeys* 1070: 41-50.

Authors contribution¹

Publisher Correspondence. – HAV
Writing the article. – HAV & HOD
Description. – HAV
Article proofreading. – HAV & HOD
Bibliographic work. – HAV
Material study. – HAV & HOD
Author of the figures. – HOD

¹ **HAV** = Jiří Háva – **HOD** = Jiří Hodeček

Résumé

Háva J. & Hodeček J., 2025. – Deux nouvelles espèces supplémentaires de *Cryptorhopalum* (Coleoptera : Dermestidae : Megatominae) de la République dominicaine. *Faunitaxys*, 13(06): 1 – 5.

Deux nouvelles espèces du genre *Cryptorhopalum* : *C. vegaensis* sp. nov. et *C. hodeceki* sp. nov., sont décrites, illustrées et comparées à des espèces morphologiquement similaires. Une clé de détermination des *Cryptorhopalum* recensées en République dominicaine est également fournie.

Mots-clés. – Coleoptera, Dermestidae, Megatominae, *Cryptorhopalum*, *vegaensis*, *hodeceki*, taxonomie, espèce nouvelle, description, République dominicaine.

Faunitaxys

Volume 13, Numéro 06, Janvier 2025

SOMMAIRE

Deux nouvelles espèces supplémentaires de *Cryptorhopalum* (Coleoptera : Dermestidae : Megatominae) de la République dominicaine.

Jiří Háva & Jiří Hodeček 1 – 5

CONTENTS

Two additional new species of *Cryptorhopalum* (Coleoptera: Dermestidae: Megatominae) from the Dominican Republic.

Jiří Háva & Jiří Hodeček 1 – 5



Illustration de la couverture :

Landscape view of the type locality of *C. vegaensis* **sp. nov.** at the road toward Constanza in Cordillera Central, Dominican Republic. (photo by J. Hodeček).

Crédits:

Jiří Hodeček : Fig. 1-2 & couverture.

Pavel Krasensky : Fig. 3-8.